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Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)	
	09/851,732	DUBOIS ET AL.	
Office Action Summary	Examiner	Art Unit	
	Jonathan G. Sterrett	3623	
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address	
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONEI	L. lely filed the mailing date of this communication. O (35 U.S.C. § 133).	
Status			
1) ☐ Responsive to communication(s) filed on 12 Ja 2a) ☐ This action is FINAL . 2b) ☐ This 3) ☐ Since this application is in condition for allowar closed in accordance with the practice under E	action is non-final. nce except for formal matters, pro		
Disposition of Claims	·		
4) Claim(s) 1-20 is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5) Claim(s) is/are allowed. 6) Claim(s) 1-20 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or Application Papers 9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) access applicant may not request that any objection to the ore Replacement drawing sheet(s) including the correction 11) The oath or declaration is objected to by the Examine	vn from consideration. r election requirement. r. epted or b) □ objected to by the Edrawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).	
Priority under 35 U.S.C. § 119	•		
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list of	s have been received. s have been received in Application rity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this National Stage	
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ite	

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DETAILED ACTION

Summary

- 1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12 January 2007 has been entered.
- 2. This **Office Action** has an attached requirement for information under **37 C.F.R.** § **1.105**. A complete response to this Office action **must include** a complete response to the attached requirement for information. The time period for reply to the attached requirement coincides with the time period for reply to this Office action.
- 3. This **Non-Final Office Action** is responsive to applicant's amendment filed 12 January 2007. Currently **Claims 1-20** are pending.

Response to Arguments

4. The applicant's arguments have been fully considered but are moot in view of new grounds of rejection.

Please see the 35 USC 103 rejections below.

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Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. **Claim 6** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding Claim 6, a number of limitations are claimed that are a "plurality of statistical parameters". These parameters refer back to Claim 5 where the effect of varying these parameters is determined to have on another parameter. Since Claim 6 states "comprising", the parameter that is selected is not required to be on the list, thus the claim is indefinite. For the purposes of examination, the examiner assumes that Claim 6 is intended to read "consisting" rather than "comprising".

Claim Rejections - 35 USC § 103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claims 1-8, 11, 12 and 14-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Cognos White Paper, "Constructing the Integrated Data

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Warehouse with Cognos e-applications", Sept 2000, pp.1-19, (hereinafter **Cognos**) in view of Cawse U.S. Patent 6,725,183 (hereinafter **Cawse**).

Regarding Claim 1, Cognos teaches:

A method of presenting an analysis of enterprise wide business data, comprising the steps of:

Page 1 column 2 para 4, Cognos teaches a method for presenting enterprise wide (i.e. from an ERP data source) data analysis (i.e. analytics are several analyses), using a robust analysis and reporting structure for presenting analysis of the ERP, front office (i.e. sales) and e-business sources.

a) in response to a user request <u>over a network</u> operable to access said enterprise wide business data and to provide analysis of said enterprise wide business data,

Page 2 column 1 para 3, Cognos e-applications run over users accessing an internet, extranet or the Internet (i.e. thru a website – see also page 17 column 2 para 2, a client-browser application running means that users are accessing a website (i.e. through an extranet, intranet or the Internet, see page 10 column 2 para 4).

.page 7 column 2 para 4, business reports are customizable (i.e. through a user request to a website running the Cognos applications on a network) based on the particular data in the data mart (para 2, e.g. site specific data).

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transferring an electronic <u>application</u> to said user, wherein said electronic <u>application</u> allows said user to select a performance measure to be analyzed for a data set in said enterprise wide business data;

Page 8, The e-applications of Cognos provide for responses to users requests for various kinds of ERP data analysis, e.g. income statement analysis. These are samples of electronic applications that are transferred to the user.

page 11 column 1 para 4, users can specify which data they want to extract (i.e. a performance measure in a "sales analysis", "financial analysis" or "inventory analysis" schema – the data that is extracted can be used to map a trend (i.e. a trend is a type of analysis showing a trendline in a data set). – since the user can specify a join using the application, this is provided through an electronic application – see the "electronic console" on page 16, column 1 – this is an electronic application.

b) in response to a request from said user, performing an analysis of said performance measure; and

page 16 column 1 para 4, the user can set parameters in the e-applications suite (i.e. in response to the user), and based on what the user specified, the e-applications returns the analysis (i.e. business analysis) to the user. – see also page 17 column 1 para 4.

c) transferring an electronic copy of said statistical analysis to said user.

page 17 column 1 para 4, the reports (i.e. the analysis) is transferred and presented to the user as a report.

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Cognos thus addresses providing a client server system (including a browser) that allows users to specify enterprise data for analyzing. Cognos provides a method operating on a computer system to allow users to customize and obtain data analysis and reports so that they can obtain "key business insight".

Cognos suggest performing lower level computational analysis such as trendlines and performing an average calculation.

Cognos does not teach providing an electronic document (e.g. an HTML page) provided by a website on the network where users can use to access the data warehousing applications, however Official Notice is taken that using a website that utilizes electronic documents to provide client/server/browser applications such as taught by Cognos is old and well known in the art. Using a website that utilizes electronic documents (e.g. html pages) provides a convenient and easy to use way to access information over a network.

It would have therefore been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Cognos, regarding providing a data warehousing application running over a network (i.e. intranet/extranet/internet), to include the step of accessing the data warehousing application at a website that provides the application using an electronic document, because it would provide a

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convenient and easy to use way to access the client/server/browser application taught by Cognos.

Cognos does not teach where the analysis is <u>statistical</u> in nature. However, performing statistical analysis based on process data that is business-oriented is taught by **Cawse**.

Cawse teaches performing a statistical analysis method using a web-based computer system (see column 9 line 9-12).

Cawse teaches storing process information in a database (Figure 7 #262 and column 6 line 65) so that the process information can be analyzed (see column 9 line 15-19, Design for Six Sigma techniques are data analysis of business performance, because the removal of variation in a process removes defects and ultimately cost from a system, i.e. thus is 'business' performance). Cawse notes that his approach (i.e. various DFSS techniques provide for analyzing business performance) can be applied using a computer system with storage devices (column 8 line 55-60).

Although Cawse demonstrates the invention in the context of a chemical process, it is noted (column 1 line 50-53, column 2 line 15-17) that the six sigma techniques are applicable to business processes as well.

Cawse and Cognos both address applying data analysis tools to understand information that is contained in stored data so that the business management can be improved, thus both Cawse and Cognos are analogous art.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Cognos, regarding providing a data warehouse that provides for user-specified analysis of business data, to include the step of where the analysis includes a statistical analysis, because the analysis of statistical variation as taught by Cawse, provides for better control and a subsequent improvement to remove defects and cost.

Regarding Claims 2, 3 and 4, Cognos does not teach:

transferring a Hyper-Text Markup Language document comprising said statistical analysis in histogram format, as per Claim 2; and overlaying on said histogram an indicator of a statistical mean and an indicator of a user specified target limit, as per Claim 3, and highlighting the area of said histogram outside of said user specified target limit, wherein the relative number of defects are graphically visible, as per Claim 4.

However Official Notice is taken that it is old and well known in the art to provide HTML documents using the client/server/browser architecture taught by Cognos,

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because HTML is a proven and reliable way to provide electronic documents over the

types of networks (intranet/extranet/Internet) taught by Cognos.

It would have been obvious to one of ordinary skill in the art at the time of the

invention to modify the teachings of Cognos, regarding providing analysis applications

using a client/server/browser architecture, to include the step of providing the

application using an HTML document with the client/server/browser architecture,

because it would provide a proven and reliable way to transmit information and requests

over a network.

Cognos teaches providing average calculations (page 8 column 1 para 4) and

teaches providing analysis of business processes over a network.

Cawse teaches providing a statistical analysis, as discussed above, and where:

providing a statistical analysis in histogram format, as per Claim 2; and

Figure 14, upper left hand chart "Process capability analysis for 2B/P" provides a

histogram representing a process capability metric.

overlaying on said histogram an indicator of a statistical mean and an

indicator of a user specified target limit, as per Claim 3, and

Figure 14, upper left hand chart "Process capability analysis for 2B/P" provides

an indicator of the mean by the superposition of a normal distribution and the vertical

bar at the position 0.9 on the x axis. This chart also contains a USL and a LSL (i.e. a

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user specified target limit, since the user is specifying the upper and lower service limits for the process to be in control.

highlighting the area of said histogram outside of said user specified target limit, wherein the relative number of defects are graphically visible, as per Claim 4.

Figure 14, upper left hand chart "Process capability analysis for 2B/P", the bar to the left of the LSL highlights the area of the histogram outside the LSL where the size of this bar provides a graphical indicator of the relative number of process observations that are below the LSL (i.e. defects since they are outside the LSL-USL range).

Cawse teaches performing this method using a web-based computer system (see column 9 line 9-12). Cawse notes that his invention can be administered over an internet (i.e. using a server) so that technical personnel working remotely can access the process information to apply six sigma techniques to the process (column 9 line 9-10).

Cawse teaches storing process information in a database (Figure 7 #262 and column 6 line 65) so that the process information can be analyzed (see column 9 line 15-19, Design for Six Sigma techniques are data analysis of business performance, because the removal of variation in a process removes defects and ultimately cost from a system, i.e. thus is 'business' performance). Cawse notes that his approach can be applied using a computer system with storage devices (column 8 line 55-60).

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Although Cawse demonstrates the invention in the context of a chemical process, it is noted (column 1 line 50-53, column 2 line 15-17) that the six sigma techniques are applicable to business processes as well.

Cawse and Cognos both address applying data analysis tools to understand information that is contained in stored data so that the business management can be improved, thus both Cawse and Cognos are analogous art.

It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the teachings of Cognos and Cawse, regarding providing a statistical analysis application using a client/server/browser architecture that utilizes HTML documents to provide an analytical application, to include the steps of providing said statistical analysis in histogram format, as per Claim 2; and overlaying on said histogram an indicator of a statistical mean and an indicator of a user specified target limit, as per Claim 3, and highlighting the area of said histogram outside of said user specified target limit, wherein the relative number of defects are graphically visible, as per Claim 4, because Cawse teaches that applying this approach using the annotated histogram provides for a way to analyze and remove variability from a business process, thus reducing defects and improving customer satisfaction.

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There is a reasonable expectation of success to combining the teachings of Cawse into Cognos because using an annotated histogram of process variation highlights areas where a business process metric is not in statistical control. The highlighting of out-of-control processes promotes management's awareness to fix the problems causing the out of control process which then reduces the variation as determined by process metrics – variation means defects and defects mean unhappy customers (see column 1 line 54-67).

Regarding Claim 5, Cognos teaches receiving and responding to electronic requests to provide analyses to said user, but does not teach:

- d) in response to an electronic request from said user, running a simulation to determine the effect varying a user specified statistical parameter of a plurality of statistical parameters has on another statistical parameter; and
- e) electronically transferring the results of said simulation to said user, wherein the user is presented a graphical display providing information to assist in quality improvement.

Cawse teaches:

d) in response to an electronic request from said user, running a simulation to determine the effect varying a user specified statistical parameter of a plurality of statistical parameters has on another statistical parameter; and

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column 8 line 10-15, a DOE (design of experiments) is a simulation that is run on a computer to determine the effect of varying inputs (i.e. the various x's) that have on other statistical parameters (i.e. the variability of the process). This is also shown in Figure 14 which shows the effects of varying the statistical parameters of the upper right hand chart has on the lower left hand chart through a DOE.

e) electronically transferring the results of said simulation to said user, wherein the user is presented a graphical display providing information to assist in quality improvement.

Column 8 line 20-25 & Figure 16 shows a contour plot that is the results of the DOE (simulation) that shows a graphical display providing information to assist in quality improvement to reduce variability.

Cawse teaches storing process information in a database (Figure 7 #262 and column 6 line 65) so that the process information can be analyzed (see column 9 line 15-19, Design for Six Sigma techniques are data analysis of business performance, because the removal of variation in a process removes defects and ultimately cost from a system, i.e. thus is 'business' performance). Cawse notes that his approach can be applied using a computer system with storage devices (column 8 line 55-60).

Although Cawse demonstrates the invention in the context of a chemical process, it is noted (column 1 line 50-53, column 2 line 15-17) that the six sigma techniques are applicable to business processes as well.

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Cawse and Cognos both address applying data analysis tools to understand

information that is contained in stored data so that the business management can be

improved, thus both Cawse and Cognos are analogous art.

It would have been obvious to one of ordinary skill in the art at the time of the

invention to further modify the teachings of Cognos and Cawse, regarding providing a

statistical analysis application using a client/server/browser architecture that utilizes

HTML documents to provide an analytical application, to include the steps of running a

simulation to determine the effects of changing statistical parameters that represent

process capability, because Cawse teaches that applying a DOE approach provides for

a way to analyze and remove variability from a business process, thus reducing defects

and improving customer satisfaction.

Regarding Claim 6, Cognos teaches receiving and responding to electronic

requests to provide analyses to said user, but does not teach:

wherein said plurality of statistical parameters comprise statistical mean,

standard deviation, a user specified target, actual percentage of data above and

below said user specified target, and sigma value.

Cawse teaches

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wherein said plurality of statistical parameters comprise statistical mean, standard deviation, a user specified target, actual percentage of data above and below said user specified target, and sigma value

Figure 14 shows a before and after histogram (upper left hand corner and lower right hand corner). This chart shows a plurality of parameters that include a statistical mean (0.914), standard deviation (.086), USL & LSL (user-specified targets for what the process capability should be), CPK (a sigma value indicating process capability), PPM<USL and PPM>LSL are actual percentages of data above and below the user-specified target.

Cawse teaches storing process information in a database (Figure 7 #262 and column 6 line 65) so that the process information can be analyzed (see column 9 line 15-19, Design for Six Sigma techniques are data analysis of business performance, because the removal of variation in a process removes defects and ultimately cost from a system, i.e. thus is 'business' performance). Cawse notes that his approach can be applied using a computer system with storage devices (column 8 line 55-60).

Although Cawse demonstrates the invention in the context of a chemical process, it is noted (column 1 line 50-53, column 2 line 15-17) that the six sigma techniques are applicable to business processes as well.

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Cawse and Cognos both address applying data analysis tools to understand information that is contained in stored data so that the business management can be improved, thus both Cawse and Cognos are analogous art.

It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the teachings of Cognos and Cawse, regarding providing a statistical analysis application using a client/server/browser architecture that utilizes HTML documents to provide an analytical application, to include the steps of measuring the effect of running a simulation to determine how changes to a process mean and user specified targets would be affected, because Cawse teaches that these measures are a way to determine process variability so that measuring the effect a simulation has on changing the process mean and target limits from one process state to another provides for a way to analyze and remove variability from a business process, thus reducing defects and improving customer satisfaction.

Regarding Claim 7, Cognos teaches:

d) in response to a user request, determining a trend of a parameter over time; and

page 6 column 2 para 1, business analysis that provides for trend analysis (i.e. answering the question "which customers in the western sales region have increased their purchases by 30 percent in the past three years" is a trend) using queries that utilize time (i.e. a data set referenced on time is a trend, since it shows how the data will

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change over time). Cognos teaches that this capability is provided, i.e. providing a trend of a parameter over time, i.e. historical data in trends, see page 13 column 2 para 2.

e) electronically transferring a display of said trend.

Page 13 column 2 para 2, since users can see how the data is changing over time, then the data is being electronically transferred to them to display the trend.

Cognos teaches that users want to see how data changes over time, since it provides for a key ability to manage the business by understanding causation (see page 3 column 2 para 6, if the inventory turnover rate suddenly dropped "you would want to know why").

Cognos notes that the data warehouse can be run over an internet/extranet/Internet as discussed above with a client/server/browser approach, however, Cognos does not teach where the **statistical parameters** are trended and does not teach conveying information using **a Hyper-Text Markup Language document**, however Official Notice is taken that using a website that utilizes electronic documents (i.e. html pages) to provide client/server/browser applications such as taught by Cognos is old and well known in the art. Using a website that utilizes electronic documents (e.g. html pages) provides a convenient and easy to use way to access information over a network.

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It would have therefore been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Cognos, regarding providing a data warehousing application running over a network (i.e. intranet/extranet/internet), to include the step of accessing the data warehousing application at a website that provides the application using an electronic document, because it would provide a convenient and easy to use way to access the client/server/browser application taught by Cognos.

Cognos does not teach where the trend of a parameter is <u>statistical</u> in nature. However, performing statistical analysis based on process data that is business oriented is taught by **Cawse**.

Cawse teachings performing a statistical analysis method using a web-based computer system (see column 9 line 9-12).

Cawse teaches that tracking a trend of a process, as measured by a process capability was necessary to ensure the best possible output (Note Figure 13 "day to day drift", i.e. measuring a trend revealed a loss in statistical capability (column 7 line 50-55).

It would have been obvious to one of ordinary skill in the art to modify the teachings of Cognos, regarding providing for the capability of users to track and display

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a trend, to include the step of tracking and displaying a statistical parameter trend, as

taught by Cawse, because it would help in process improvement through identifying

trends that indicate an out of control process.

Regarding Claim 8, Cognos and Cawse teach the trend displaying a statistical

parameter, as discussed above.

Cognos does not teach:

wherein said statistical parameter is a sigma value.

Cawse teaches:

wherein said statistical parameter is a sigma value.

the sigma value is a statistical parameter that is a measure of process capability

(column 1 line 50-55). Cawse further teaches that when the sigma value goes up (i.e.

higher process capability) the customer satisfaction also goes up since the sigma value

is reflective of the number of defects.

It would have been obvious to one of ordinary skill in the art at the time of the

invention to modify the teachings of Cognos, regarding providing for trending of

parameters that are important to the business, as taught by Cognos, to include the step

of trending the sigma value as a statistical parameter, as taught by Cawse, because it

would provide a way ensure customer satisfaction by tracking how well the process is

producing defect-free products.

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Claim 11 addresses limitations addressed by the rejections of Claims 1-8 above, except for where the database comprises business data – Cognos teaches a database comprising business data (see page 2 column 2 para 4 under "Enterprise Data Warehouses – the 'Big Bang' approach").

Regarding Claim 12, Cognos and Cawse teach the limitations above, including providing a simulation electronically to a user. Cognos teaches using a client/server/browser approach in providing information to a user.

Cognos and Cawse do not teach providing information using an HTML document to a user.

However Official Notice is taken that it is old and well known in the art to provide HTML documents using the client/server/browser architecture taught by Cognos, because HTML is a proven and reliable way to provide electronic documents over the types of networks (intranet/extranet/Internet) taught by Cognos.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Cognos and Cawse, regarding providing simulation display results using a client/server/browser architecture, to include the step of providing the application using an HTML document with the client/server/browser architecture,

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because it would provide a proven and reliable way to transmit information and requests

over a network.

Claim 14 recites limitations already addressed by the rejection of Claim 4 above;

therefore, the same rejection applies.

Regarding Claim 15, Cognos and Cawse teaches the limitations above in Claim

1, and Cognos teaches providing selectable data fields to the user for the user to select

a plurality of dimensions (page 11 column 1 para 3, data fields are selectable for various

queries of the data in the database to provide analysis based on the data that is

selected).

Regarding Claim 16, Cognos teaches:

d) collecting said data from a plurality of databases; and

Page 1 column 2 para 4, the data for Cognos' Integrated Data Warehouse comes

from ERP systems, front office (i.e. sales) and e-business sources (i.e. databases since

these systems are known to utilize databases for storing transactional data). - note the

examples given in page 7 column 1 para 2, data is being extracted from different

databases, e.g. SAP R/3, Oracle and JD Edwards are all ERP systems that utilize

databases for storing ERP transactional data.

e) formatting said data in a single format, wherein data from multiple

formats is converted to a single format and stored on a single database,

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Page 12 column 2 para 2, the ETL (extract, transform, load) process formats data to a single format (since the data is coming from different sources and is 'integrated').

page 6 column 1 para 4, data is being extracted to a single database.

and wherein said peripheral computer system does not have direct access to said databases.

page 2 column 2 para 3, Cognos teaches placing the extract in a separate database (i.e. a datamart) to prevent a large number of queries to the source (i.e. the ERP system) from crashing the system and preventing it from performing key functions. This also makes the ERP system secure (i.e. "secure broad access").

Regarding Claim 17, Cognos and Cawse teaches the limitations above in Claim 1 and Cognos teaches where the analysis is available to multiple distributed peripheral computer systems.

page 17 column 2 para 2, Users using a web browser (i.e. a client/server/browser system) that are remote can access the analyses provide by Cognos' e-applications.

Regarding Claim 18, Cognos does not teach:

formatting said statistical analysis in graphical format, wherein the variance of said data set is graphically viewable.

Cawse teaches:

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formatting said statistical analysis in graphical format, wherein the variance of said data set is graphically viewable.

As noted above, the histogram shown by Cawse is a format of a statistical analysis that is in graphical format – since the histogram referenced by Cawse is a representation of a statistical PDF function, this makes the variance of the data set graphically viewable (i.e. the variance is shown as a normally distributed 'bell curve').

Cawse notes that his approach (i.e. various DFSS techniques provide for analyzing business performance) can be applied using a computer system with storage devices (column 8 line 55-60).

Although Cawse demonstrates the invention in the context of a chemical process, it is noted (column 1 line 50-53, column 2 line 15-17) that the six sigma techniques are applicable to business processes as well.

Cawse and Cognos both address applying data analysis tools to understand information that is contained in stored data so that the business management can be improved, thus both Cawse and Cognos are analogous art.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Cognos, regarding providing a data warehouse that provides for user-specified analysis of business data, to include the step of where the

analysis includes a statistical analysis, because the analysis of statistical variation as taught by Cawse, provides for better control and a subsequent improvement to remove defects and cost.

Regarding Claim 19, Cognos does not teach:

the step of highlighting data points which are outside of a target range, wherein the relative number of defective data are viewable.

Cawse teaches:

the step of highlighting data points which are outside of a target range, wherein the relative number of defective data are viewable.

Figure 14, upper left hand chart – the use of PPM>USL and PPM<LSL provide for highlighting data points (since PPM – parts defective per million) where this highlighting provides a view of the relative number of defects, since PPM provides a relative defect measure. The use of LSL (lower service limit) and USL (upper service limit) provide bounds for a target range.

Cawse notes that his approach (i.e. various DFSS techniques provide for analyzing business performance) can be applied using a computer system with storage devices (column 8 line 55-60).

Although Cawse demonstrates the invention in the context of a chemical process, it is noted (column 1 line 50-53, column 2 line 15-17) that the six sigma

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techniques are applicable to business processes as well. Cawse application of six sigma tools provide for analyzing variability, both graphically and numerically as shown by the charts of Figure 14, so that variation in processes can be reduced. The use of PPM techniques provides an indication of how many defects per million a process will produce. Cawse notes that the variation and relative number of defects indicated by the upper left hand chart of Figure 14 illustrate a process that has wide variability (see column 7 line 63-67). This analysis supported a rationale to improve the process, since the variation was shown to be outside the user specified target (i.e. the LSL).

Cawse and Cognos both address applying data analysis tools to understand information that is contained in stored data so that the business management can be improved, thus both Cawse and Cognos are analogous art.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Cognos, regarding providing a data warehouse that provides for user-specified analysis of business data, to include the step of where the analysis includes highlighting the relative number of defective data, because it would lead to process improvements by showing where there is excessive variation in process capability.

Claim 20 recites limitations already addressed by the rejection of Claim 5 above; therefore, the same rejection applies.

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xx. Claims 9, 10 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Cognos in view of Cawse and further in view of U.S. Patent 6,853,923 Hsuing

(hereinafter Hsuing).

Regarding Claim 9, Cognos teaches adding data to a database for the purpose

of using that data for analysis (page 6 column 1 para 2; column 2 para 3). Cognos

teaches checking the data as it is added for errors (page 6 column 1 para 2). Cognos

teaches trending business data as discussed above.

Cawse teaches the need the track the trend of data (column 7 line 50-55)

because it shows that the process is drifting.

Cognos and Cawse do not teach:

d) as new data is gathered, determining if a statistical parameter for said

performance measure is outside a user specified target;

and e) automatically notifying said user if said step d) is true, wherein said

notification comprises an electronically delivered message to a user specified

node.

Hsuing teaches:

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d) as new data is gathered, determining if a statistical parameter for said performance measure is outside a user specified target;

column 16 line 5-10, data is gathered from a process as an ongoing approach to provide process control. – this data is compared against what statistical process parameters (see line 55-60) would predict for the process based on what the performance measure (i.e. the incoming data) is.

column 16 line 25-30, the determination is made by comparing new data against the output predicted by the model (i.e. a user specified target, the type of model used to predict is specified by the user and includes, line 20-21, where statistical parameters are being measured) to determine if the process statistical parameter is outside what the model would predict, e.g. line 43-44, the failure of a pump produces process data outside what a model would show the statistical process parameter to be.

and e) automatically notifying said user if said step d) is true, wherein said notification comprises an electronically delivered message to a user specified node.

column 16 line 40-45, a pager or voicemail (i.e. a user-specified node) is notified that a process parameter is out of control. Since pagers and voicemail are electronically operated, a message to these is an electronically delivered message.

Hsuing teaches that his method of process control can apply to data gathered from enterprise resource planning (ERP) systems (column 6 line 20-21). In column 3

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line 55-60, Hsuing notes that any process can be monitored (see also column 1 line 43,

data from commerce can be monitored and the underlying process controlled)

Hsuing notes that one benefit of using his invention is that since the data is being

gathered and analyzed in real time (column 3 line 47-50), it provides immediate control

over processes, since the analyzing function (i.e. the determining step regarding

something being out of control) occurs in real time on the data.

Cognos, Cawse and Hsuing all address using process data to provide control

and monitoring over processes so that process control is improved, thus Cognos,

Cawse and Hsuing are all analogous art.

It would have been obvious to one of ordinary skill in the art at the time of the

invention to further modify the collective teachings of Cognos and Cawse, regarding

providing a network based system to collect and statistically analyze business process

data, to include the steps of determining and notifying when a process is out of control

(i.e. a statistical parameter exceeds a user-specified target), because it would enable

those responsible for monitoring a process to take quick action since the determining

and notifying steps of Hsuing are performed in real time.

Regarding Claim 10, Cognos teaches

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analyzing said performance measure according to a periodic rate specified

by said user.

page 8 column 1 para 1-2, financial analysis e-applications provide for an

analysis of a business performance measure (i.e. period end closings provide balance

sheet closings) that occur according to a periodic rate (i.e. at the end of a period, para

3, a balance sheet and income statements). Note page 7 para 2, the data to be

extracted for these e-applications is defined on the date (i.e. a periodic rate specified)

that is defined by the user.

Claim 13 recites limitations already addressed by the rejection of Claim 9 above;

therefore, the same rejection applies.

Conclusion

The prior art made of record and not relied upon is considered pertinent to 9.

applicant's disclosure.

ORACLE: Oracle delivers global sales and marketing analysis to the web

M2 Presswire. Coventry: Sep 21, 1999. pg. 1

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Looking for the right fit Sidney Hill Jr. Manufacturing Systems. Wheaton: Aug 1999.Vol.17, Iss. 8; pg. 28, 6 pgs.

Component-based knowledge engineering architecture, Won Kim, Ki-Joon Chae, Dong-Sub Cho, Byoungju Choi, et al. Journal of Object - Oriented Programming. New York: Oct 1999.Vol.12, Iss. 6; pg. 40, 10 pgs.

Oracle Announces Licensing Agreement With Roadmap Technologies to

Accelerate Demand Planning and Business Forecasting Process PR

Newswire. New York: Sep 28, 1999. pg. 1

Digging for nuggets of data, Michael Lattig, Bob Trott. InfoWorld. San Mateo: Apr 26, 1999.Vol.21, Iss. 17; pg. 1, 2 pgs.

Application of intelligent agent technology for managerial data analysis and mining, Ranjit Bose, Vijayan Sugumaran. Database for Advances in Information Systems. New York: Winter 1999.Vol.30, Iss. 1; pg. 77, 18 pgs

Enterprise Information Portals – Move over Yahoo!; the Enterprise

Information Portal is on its Way, Christopher C Shilakes, Julie Tyman. Merrill Lynch

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Industry Report - . 16 November 1998, 64 pgs, retrieved from the web at ikt.hia.no/perep/eip_ind.pdf.

Cognos® Announces Multi-Million Dollar Agreement with GE's Employers

Reinsurance Corporation PRNewswire. . New York, August 9, 2000, pg.

ProQuest Document ID 57711097.

Business Intelligence Elite Descend on Redwood Shores for Strategy

Briefing with Oracle™ PRNewswire. New York, November 12, 1999, pg.1 ProQuest

Document ID 46314117.

One Vendor, One Solution, Talita Baron, InformationWeek, Manhasset, Nov 8, 1999, Iss. 760, p.108, 3 pgs.

Oracle™ New Express® Server 6.3 Provides Fastest Answers to Business'

Hardest Qeustions PRNewswire, New York, November 8, 1999, p.1 ProQuest

Document ID 46197918.

GE IT Chief reviews progress Shane Shick, Computer Reseller News, Willowdale, July 30, 1999, vol 15, Iss. 29, p.10, 1 pgs, ProQuest Document ID 43776177.

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Predicting Movement Barry Grushkin, Intelligent Enterprise, San Mateo, Aug 3, 1999, Vol. 2, Iss. 11, p.18, 8 pgs, ProQuest Document ID 43597990.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan G. Sterrett whose telephone number is 571-272-6881. The examiner can normally be reached on 8-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on 571-272-6729. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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DETAILED ACTION

Requirement for Information Under 37 C.F.R. 1.105

- 1. Applicant and the assignee of this application are required under 37 CFR 1.105 to provide the following information that the examiner has determined is reasonably necessary to the examination of this application.
- 2. The information is required to identify any products and/or services of the applicants or assignee (Oracle Corporation) embodying the disclosed subject matter of a method for providing for business intelligence analyses using a database and a webbased interface. The Examiner upon conducting a search for prior art, discovered press releases and published information contained in the prior art (see the PRNewswire Press Releases including the Express® Server 6.3 release on Nov 9, 1999; the Grushkin article detailing the Oracle "Sales Analyzer" and the "Financial Analyzer"; the Schick article detailing a business intelligence program called "Oracle Datamart Suite"; and a PRNewsire article that indicated Oracle was liscensing technology for automating statistical forecasting, i.e. simulation/model building and use) that a business intelligence program for use in analyzing data from a database was for sale by the assignee.

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All of the above referenced publications and websites were published in English more than a year prior to the date for the instant application and the provisional application.

Independent claims 1, 11 and 15 cite limitations where analyses of enterprise wide business data is provided by allowing a user to obtain analyses from stored business data, as described by the above articles.

In response to this requirement please provide any known publications, brochures, manuals, marketing presentations/materials and press releases that describe the Oracle's products that are described by cited art and specifically what product or service was marketed or developed that was the subject of the disclosures. Please provide any information (emails, presentations, etc.) related to any marketing launch and public use, as disclosed in the cited prior art, between Oracle and other firms, where a enterprise business intelligence product was produced and marketed, where this information is **related to the patentability of the instant application**.

In response to this requirement, please provide the citation and a copy of each publication which any of the applicants authored or co-authored and which describe the disclosed subject matter of a enterprise business intelligence product.

In response to this requirement, please provide the citation and copy of each publication that is a source used for the description of the prior art in the disclosure. For

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each publication, please provide a concise explanation of that publication's contribution to the description of the prior art.

In response to this requirement, please provide the citation and a copy of each publication that any of the applicants relied upon to develop the disclosed subject matter that describes the applicant's invention, particularly as to developing a a enterprise business intelligence product. For each publication, please provide a concise explanation of the reliance placed on that publication in the development of the disclosed subject matter.

In response to this requirement, please provide the citation and a copy of each publication that any of the applicants relied upon to draft the claimed subject matter.

For each publication, please provide a concise explanation of the reliance placed on that publication in distinguishing the claimed subject matter from the prior art.

In response to this requirement, please provide the names of any products or services that have incorporated the claimed subject matter.

In response to this requirement, please provide the names of any products or services that have incorporated the disclosed prior art either utilized in, or resulting from, the product as noted by the press releases of the product launch and public use of this product.

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- 3. The fee and certification requirements of 37 C.F.R. 1.97 are waived for those documents submitted in reply to this requirement. This waiver extends only to those documents within the scope of this requirement under 37 C.F.R. 1.105 that are included in the applicant's first complete communication responding to this requirement. Any supplemental replies subsequent to the first communication responding to this requirement and any information disclosures beyond the scope of this requirement under 37 C.F.R. 1.105 are subject to the fee and certification requirements of 37 C.F.R. 1.97.
- 4. In responding to those requirements that require copies of documents, where the document is a bound text or a single article over 50 pages, the requirement may be met by providing copies of those pages that provide the particular subject matter indicated in the requirement, or where such subject matter is not indicated, the subject matter found in applicant's disclosure.
- 5. The applicant is reminded that the reply to this requirement **must be made with** candor and good faith under 37 CFR 1.56. Where the applicant does not have or cannot readily obtain an item of required information, a statement that the item is unknown or cannot be readily obtained will be accepted as a complete response to the requirement for that item.
- 6. This requirement is subject to the provisions of 37 C.F.R. 1.134, 1.135 and 1.136 and has a reply period that coincides with the attached Office Action.

 EXTENSIONS OF THIS TIME PERIOD MAY BE GRANTED UNDER 37 CFR 1.136(a).

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Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan G. Sterrett whose telephone number is 571-272-6881. The examiner can normally be reached on 8-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on 571-272-6729. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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